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994	Title 2009 Fall Wild Turkey Harvest Results	3/16/2010

Abstract: *Hunters harvested 773 wild turkeys in 66 of the 74 counties open to hunting during the fifth fall turkey hunting season. The 2009 fall harvest was 27% more than the 610 birds taken during the 2008 fall turkey season and the highest harvest in 5 years of fall turkey hunting. The 20-day archery-only season accounted for 30% of the harvest with 70% of the harvest occurring the last 5 days of the combined shotgun and archery season. Shotgun hunters accounted for 58% of the harvest. Weekends accounted for 46% of the total harvest with 32% during the one weekend of the combined archery and shotgun portions. Juvenile birds made up 19% of the harvest with a juvenile to adult ratio of 1:4. The high adult proportion (81%) was probably related to a combination below average brood production in 2009, hunter selection for larger adult birds, and age determination errors. Counties harvesting at least 30 birds ($\geq 5\%$ of harvest total) were Harrison, Crawford, Warrick, Lawrence, Switzerland and Pike. The proportion of the fall to spring harvest by county ranged from 0% to 14% and the statewide fall to spring harvest proportion was 6% due to the conservative season structure and relatively low hunter interest.*

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The 5th modern day fall wild turkey hunting season in Indiana was held from October 1-25, 2009. The archery-only portion of the season occurred from October 1-20 in 74 counties. The combined shotgun and archery portion occurred from October 21-25. Shotgun hunting was limited to 34 counties primarily in the southern portion of the state. Hunters harvested a total of 773 birds during the entire season with 233 (30%) taken during the 20-day archery-only portion and 540 (70%) taken during the 5 day combined shotgun and archery portion (Table 1). The 2009 fall harvest was 27% more than the 610 birds taken during the 2008 fall turkey season and was the highest harvest since fall turkey hunting was implemented in 2005. Across both portions of the 2009 fall turkey season, archers harvested 320 birds (42%) while shotgun hunters took 447 birds (58%). Weekends accounted for 46% of the harvest with 14% during 3 weekends of the archery-only portion and 32% on the 1 weekend of the combined shotgun and archery portion (Table 2).

Comprehensive lifetime license holders harvested 62% of the birds followed by resident fall turkey license holders (22%) with 12% of the harvest by exempt landowners and active military on leave (Table 3). The number of resident fall turkey licenses increased by 365 permits (+22%) and nonresident fall turkey licenses increased from 13 to 17 permits sold. There was no discernable reason to explain the 29% drop in the youth licenses sold through the fall season. The proportion of the harvest by youths (7%) was similar to 2008 (6%). The number of license-exempt landowners and active military personnel participating in the fall hunting seasons is unknown.

The determination of the sex and age of harvested wild turkeys was done by hunters and check station operators using a combination of spur and fall plumage characteristics (wing and breast feathers) as depicted in illustrations provided in the Indiana Hunting and Trapping Guide. Juvenile birds made up 19% of the harvest while adults composed 81% for a juvenile to adult ratio of 1:4 (Table 4). Adult hens composed the largest proportion (47%) of the harvest, followed by adult gobblers. Based on observations in other states, a high proportion of adults in the fall harvest, especially adult hens, generally follow a summer of poor brood

production. Brood production in Indiana during the 2009 summer was below average as it has been each summer since 2005. In contrast, fall harvest research in other states generally report that adult males (AM) are the least vulnerable to fall harvest compared to the other sex/age cohorts. Hunter selection for larger birds, when given the opportunity, might also contribute to the high proportion of adult males in Indiana's fall harvests. Finally, the interpretation of the fall sex and age criteria by hunters and check station operators is an undetermined error factor. Accurate sex and age determinations of fall turkeys are a common problem, even in states with more fall turkey hunting experience.

Counties harvesting at least 30 birds ($\geq 5\%$ of the total harvest) were Harrison, Crawford, Warrick, Lawrence, Switzerland and Pike (Table 5; Figure 2). Eight counties open to archery only hunting did not harvest a single bird. The proportion of the fall to spring harvest by county ranged from 0% to 14% and the statewide fall to spring harvest proportion was 6% due to the conservative season structure and relatively low hunter interest.

Table 1. Fall wild turkey harvest by season and equipment used - Indiana, 2009.

Season	Archery Only		Both Shotgun & Archery		Equipment Totals	
Dates	1-20 October 2009		21-25 October 2009			
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Bow	233	100%	87	16%	320	41%
X-Bow	0	0%	6	1%	6	1%
Shotgun	---	---	447	83%	447	58%
<i>Season Totals^a</i>	233	30%	540	70%	773	100%

^a Represents proportion of total harvest (773) taken during the archery-only or the combined shotgun and archery portions of the fall season.

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Table 2. Fall wild turkey harvest by day of the 2009 season, Indiana.

Date	Day	No. Harvested	Percent of Total	Cummulative Totals ^a	Cummulative Percent
<i>Archery Only</i>					
10/1/2009	Thur	20	2.6%	20	2.6%
10/2/2009	Fri	20	2.6%	40	5.2%
10/3/2009	Sat	20	2.6%	60	7.8%
10/4/2009	Sun	19	2.5%	79	10.2%
10/5/2009	Mon	11	1.4%	90	11.6%
10/6/2009	Tue	11	1.4%	101	13.1%
10/7/2009	Wed	5	0.6%	106	13.7%
10/8/2009	Thur	6	0.8%	112	14.5%
10/9/2009	Fri	4	0.5%	116	15.0%
10/10/2009	Sat	20	2.6%	136	17.6%
10/11/2009	Sun	14	1.8%	150	19.4%
10/12/2009	Mon	2	0.3%	152	19.7%
10/13/2009	Tue	6	0.8%	158	20.4%
10/14/2009	Wed	5	0.6%	163	21.1%
10/15/2009	Thur	6	0.8%	169	21.9%
10/16/2009	Fri	6	0.8%	175	22.6%
10/17/2009	Sat	17	2.2%	192	24.8%
10/18/2009	Sun	19	2.5%	211	27.3%
10/19/2009	Mon	13	1.7%	224	29.0%
10/20/2009	Tue	9	1.2%	233	30.1%
Archery Only Subtotal		233	30.1%		
<i>Both Archery and Shotgun</i>					
10/21/2009	Wed	97	12.5%	97	12.5%
10/22/2009	Thur	80	10.3%	177	22.9%
10/23/2009	Fri	113	14.6%	290	37.5%
10/24/2009	Sat	148	19.1%	438	56.7%
10/25/2009	Sun	102	13.2%	540	69.9%
Combined Portion Subtotal		540	69.9%		
Season Total		773			100.0%

^a Cummulative totals listed by respective by archery-only and the combined shotgun-archery portions of the fall turkey season.

Table 3. Fall wild turkey harvest by permit type - Indiana, 2009.

Type of Permit	No. Harvested	% of Harvest	No. Licenses Sold by Season End Date ^a	Differences in Licenses Sold from Prior Year (%)
Resident Fall Turkey	170	22%	2,054	+365 (+22%)
Non-Resident Fall Turkey	1	0%	17	+4 (+31%)
Comprehensive Lifetime	443	62%	43,028 ^b	----- ^b
Comprehensive Youth	54	7%	26,553	-10,639 (-29%)
Landowner/active military	94	12%	Unknown & Exempt	Unknown & Exempt
Total ^c	762			

^a Apprentices licenses (new 2008) included in respective license type totals.

^b Comprehensive lifetime hunt and hunt & fish licenses as of July 2005 when the lifetime licenses discontinued. Value represents the number of lifetime license holders who could potentially hunt.

^c Missing values for permit type = 11; actual total harvest = 773.

Table 4. Age and sex structure of the fall wild turkey harvest - Indiana, 2009.

	Juvenile ^a		Adult ^b		Total ^c	
	No.	% ^c	No.	% ^c	No.	% ^c
Male	52	6.9%	251	33.4%	303	40.3%
Female	94	12.5%	354	47.1%	448	59.7%
Total ^c	146	19.4%	605	80.6%	751	
Juvenile : Adult					1 : 4	

^a Juvenile were birds estimated to be < 6 months old.

^b Adults were birds estimated to be ≥ 14 months old.

^c Percents are based on 751 birds; sex/age not recorded for 22 birds of 773 total harvest.

Table 5. Fall and spring wild turkey harvests in Indiana, 2009. ^a

County	Type of Fall Season ^b	2009 Fall Harvest	Percent of Fall Harvest	2009 Spring Harvest	Percent of Fall / Spring
Adams	Not Open	---	---	9	---
Allen	Not Open	---	---	21	---
Bartholomew	Archery	1	0.2%	136	0.7%
Benton	Archery	0	0.0%	10	0.0%
Blackford	Not Open	---	---	2	---
Boone	Not Open	---	---	2	---
Brown	Both	25	4.1%	175	14.3%
Carroll	Archery	1	0.2%	12	8.3%
Cass	Archery	0	0.0%	34	---
Clark	Both	27	4.4%	293	9.2%
Clay	Both	3	0.5%	114	2.6%
Clinton	Not Open	---	---	1	---
Crawford	Both	33	5.4%	312	10.6%
Daviess	Archery	1	0.2%	113	0.9%
Dearborn	Both	23	3.8%	397	5.8%
Decatur	Archery	3	0.5%	64	4.7%
DeKalb	Archery	9	1.5%	157	5.7%
Delaware	Not Open	---	---	1	---
Dubois	Both	14	2.3%	263	5.3%
Elkhart	Archery	3	0.5%	92	3.3%
Fayette	Archery	1	0.2%	58	1.7%
Floyd	Both	17	2.8%	102	16.7%
Fountain	Both	6	1.0%	141	4.3%
Franklin	Both	23	3.8%	355	6.5%
Fulton	Archery	3	0.5%	105	2.9%
Gibson	Archery	2	0.3%	126	1.6%
Grant	Archery ^c	0	0.0%	5	---
Greene	Both	17	2.8%	343	5.0%
Hamilton	Not Open	---	---	1	---
Hancock	Not Open	---	---	1	---
Harrison	Both	61	10.0%	511	11.9%
Hendricks	Not Open	---	---	9	---
Henry	Not Open	---	---	2	---
Howard	Archery	0	0.0%	9	---
Huntington	Archery	1	0.2%	44	2.3%
Jackson	Both	26	4.3%	293	8.9%
Jasper	Archery	6	1.0%	64	9.4%
Jay	Not Open	---	---	6	---
Jefferson	Both	21	3.4%	447	4.7%
Jennings	Both	16	2.6%	326	4.9%
Johnson	Archery	1	0.2%	33	3.0%
Knox	Archery	3	0.5%	93	3.2%
Kosciusko	Archery	4	0.7%	86	4.7%
Lagrange	Archery	2	0.3%	139	1.4%
Lake	Archery	0	0.0%	15	---
LaPorte	Archery	10	1.6%	242	4.1%
Lawrence	Both	31	5.1%	295	10.5%

Table 5 con't on next page.

Table 5. Fall and spring wild turkey harvests in Indiana, 2009. ^a

County	Type of Fall Season ^b	2009 Fall Harvest	Percent of Fall Harvest	2009 Spring Harvest	Percent of Fall / Spring
Madison	Not Open	---	---	0	---
Marion	Not Open	---	---	0	---
Marshall	Archery	11	1.8%	310	3.5%
Martin	Both	10	1.6%	235	4.3%
Miami	Archery	1	0.2%	26	3.8%
Monroe	Both	13	2.1%	215	6.0%
Montgomery	Archery	1	0.2%	60	1.7%
Morgan	Archery	1	0.2%	83	1.2%
Newton	Archery	3	0.5%	99	3.0%
Noble	Archery	2	0.3%	61	3.3%
Ohio	Both	11	1.8%	174	6.3%
Orange	Both	22	3.6%	297	7.4%
Owen	Both	19	3.1%	231	8.2%
Parke	Both	7	1.1%	278	2.5%
Perry	Both	24	3.9%	352	6.8%
Pike	Both	30	4.9%	322	9.3%
Porter	Archery	0	0.0%	21	---
Posey	Archery	3	0.5%	143	2.1%
Pulaski	Archery	6	1.0%	121	5.0%
Putnam	Both	7	1.1%	151	4.6%
Randolph	Not Open	---	---	0	---
Ripley	Both	13	2.1%	266	4.9%
Rush	Not Open	---	---	2	---
St. Joseph	Archery	11	1.8%	178	6.2%
Scott	Both	19	3.1%	207	9.2%
Shelby	Not Open	---	---	4	---
Spencer	Both	17	2.8%	311	5.5%
Starke	Archery	7	1.1%	285	2.5%
Steuben	Archery	17	2.8%	323	5.3%
Sullivan	Both	13	2.1%	265	4.9%
Switzerland	Both	30	4.9%	530	5.7%
Tippecanoe	Archery	0	0.0%	46	---
Tipton	Not Open	---	---	0	---
Union	Both	3	0.5%	75	4.0%
Vanderburg	Archery	1	0.2%	34	2.9%
Vermillion	Archery	7	1.1%	120	5.8%
Vigo	Both	10	1.6%	193	5.2%
Wabash	Archery	0	0.0%	49	---
Warren	Archery	2	0.3%	130	1.5%
Warrick	Both	32	5.2%	347	9.2%
Washington	Both	18	3.0%	275	6.5%
Wayne	Archery	4	0.7%	41	9.8%
Wells	Not Open	---	---	7	---
White	Archery	4	0.7%	51	7.8%
Whitley	Not Open	---	---	16	---
Totals		773	100.0%	12,993	5.9%

^a Harvest totals from check station reports.^b Archery = archery only. Both = archery and shotguns.^c Only part of county open; e.g., western Grant County archery only, eastern Grant closed.

Figure 1. 2009 Fall Wild Turkey Harvest

